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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,559	03/05/2008	Youness El Ouair	3103.04WOUS	4220

24113 7590 07/21/2011
PATTERSON THUENTE CHRISTENSEN PEDERSEN, P.A.
4800 IDS CENTER
80 SOUTH 8TH STREET
MINNEAPOLIS, MN 55402-2100

EXAMINER

FREJD, RUSSELL WARREN

ART UNIT	PAPER NUMBER
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2128

MAIL DATE	DELIVERY MODE
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07/21/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Supplemental
Notice of Allowability**

Application No.

10/585,559

Examiner

RUSSELL W. FREJD

Applicant(s)

EL OUAIR ET AL.

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the IDS received 7/1/11.
2. ☒ The allowed claim(s) is/are 1-33,36 and 37.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 7/1/11
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/RUSSELL W FREJD/
Primary Examiner, Art Unit 2128

Supplemental Allowance of Application #10/585,559

1. The following communication is in response to applicant's IDS received 1-July-2011. Claims 1-33, 36 and 37 are pending in the application. Claims 34 and 35 are canceled.

Reasons for Allowance

2. The following is an Examiner's Statement of Reasons for the indication of allowable subject matter. The present application is directed to a non-obvious improvement over USP 6,424,918 (JORGENSEN et al), which teaches the inversion of gravity and magnetic data and combining the result of the inversion process with seismic data to provide velocity models and to improve depth models to locate possible hydrocarbon bearing zones in areas of anomalies such as salt, or igneous formations.

Furthermore, in regard to the IDS received 1-July-2011, the references cited therein have been considered, but are not deemed to read upon the invention as presently claimed, for the reasons stated below.

- 2.1 Claims 1-33, 36 and 37 are considered allowable, since when reading the claims in light of the specification, as per MPEP § 2111.01, none of the references of record, either individually or in combination, disclose the specific arrangement of elements in the same combination specified in independent claims nos. 1 and 37 for processing seismic data representing a physical system, specifically including a method of data inversion that operates directly on seismic difference data, and in particular to the difference between two sets of measured data representing a system in first and second states, wherein the difference data is inverted in

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accordance with a parameterized model of the system, in order to provide correct quantitative statistical treatment of the uncertainties in the parameters of the model.

It is for these reasons that the claims of the present application are found to be patentable over the prior art.

Dependent claims 2-33 and 36 are deemed allowable as depending either directly or indirectly from allowed independent claim no. 1.

2.2 Independent claim 37 further uses “means for” language, and is given deference in view of *In re Donaldson* and interpreted in view of 35 U.S.C. § 112, Sixth Paragraph. The “means for” language, and the limitations related thereto of claim 37, are interpreted within the scope of enablement as provided within the relative embodiment provided within the specification. See p. 12 of applicant’s remarks, received 16-March-2011, for additional details.

Response Guidelines

3. Any comments considered necessary by applicant **MUST** be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should clearly be labeled “Comments on Statement of Reasons for Allowance”.

3.1 Any response to the Examiner in regard to this allowance should be

directed to: Russell Frejd, telephone number (571) 272-3779, Monday-Friday from 0700 to 1530 ET, **or** the examiner’s supervisor, Kamini Shah, telephone number (571) 272-2279. Inquires of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist (571) 272-2100.

mailed to: Commissioner of Patents and Trademarks

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P.O. Box 1450, Alexandria, VA 22313-1450

or faxed to: (571) 273-8300

Hand-delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA, 22314.

/Russell Frejd/
Primary Examiner AU 2128